Application No.: 10/814,480 2 Docket No.: 223002107200

AMENDMENTS TO THE CLAIMS

1-20. (canceled)

21. (previously presented): A pharmaceutical vaccine composition comprising a benzazole compound adjuvant and an antigen, wherein said benzazole compound adjuvant is present in an amount effective to enhance the immune response in a subject to the antigen, and wherein the benzazole compound is of formula (XXI):

wherein.

A is selected from the group consisting of -O-, -S-, -NH-, and -NR8-;

W is selected from the group consisting of -CH₂-, -O-, -S-, -NH-, and -NR₈-;

R₇ is selected from the group consisting of carbocyclyl, unfused carbocyclylcarbocyclyl, substituted aryl, unsubstituted aryl, substituted heteroaryl, unsubstituted fused arylheteroaryl, unsubstituted fused arylheteroaryl, substituted unfused arylaryl and unsubstituted unfused arylaryl;

R₆ is selected from the group consisting of substituted or unsubstituted aryl, and substituted or unsubstituted heteroaryl; and,

R₈ is independently substituted or unsubstituted alkyl, or a pharmaceutically acceptable salt, ester, or prodrug thereof.

22-23. (canceled)

24. (previously presented): The pharmaceutical vaccine composition of claim 21 wherein the antigen is associated with a disease selected from the group consisting of mycobacterial infection, cholera, plague, typhoid, hepatitis B, influenza, polio, rabies, measles, mumps, rubella.

Application No.: 10/814,480 3 Docket No.: 223002107200

yellow fever, tetanus, diphtheria, hemophilus influenzae b, meningococcal infection, and pneumococcal infection.

25. (canceled)

(previously presented): The pharmaceutical vaccine composition according to claim
wherein the immune response is the cellular production of one or more cytokines.

27-29. (canceled)

30. (previously presented): The pharmaceutical vaccine composition of claim 21 wherein the benzazole compound is selected from the group consisting of:

 $N-methyl-4-[(2-\{[2-(1-methylethyl)phenyl]amino\}-1H-benzimidazol-5-yl)oxy]pyridine-2-carboxamide;$

 $N-methyl-4-\{[\ 1-methyl-2-(\{3-[(trimethylsilyl)ethynyl]phenyl\}amino)-1H-benzimidazol-5-yl]oxy\}pyridine-2-carboxamide;$

 $N-methyl-4-[\{1-methyl-2-\{[2-(phenylcarbonyl)phenyl]amino\}-1H-benzimidazol-5-yl) oxylpyridine-2-carboxamide;$

 $\label{lem:continuous} 4-(\{2-[(4-butylphenyl)amino]-1,3-benzothiazol-5-yl\}oxy)-N-methylpyridine--2-carboxamide;$

 $N-methyl-4-(1-methyl-2-[(6-pyrrolidin-1-ylpyridin-3-yl)amino]-1H-benzimidazol-5-yl] \\oxy)pyridine-2-carboxamide;$

4-({2-[1,1'-bi(cyclohexyl)-2-ylamino]-1-methyl-1 H-benzimidazol-5-yl}oxy)-N-methylpyridine-2-carboxamide;

4-({2-[(4-chlorophenyl)amino}-1-methyl-1 H-benzimidazol-5-yl}oxy)-N-1,3-thiazol-2-ylpyridine-2-carboxamide;

4-[(1-methyl-2-{[2-(methyloxy)phenyl]amino}-1H-benzimidazol-5-yl)oxy]-N-[-3-(methyloxy)propyl]pyridine-2-carboxamide; and,

 $4-(\{2-[(4-ethylphenyl)amino]-1,3-benzoxazol-5-yl\}oxy)-N-methylpyridine-2-carboxamide.$

31-35. (canceled)

- 36. (previously presented): The pharmaceutical vaccine composition of claim 21, wherein the antigen is associated with influenza.
- 37. (previously presented): The pharmaceutical vaccine composition of claim 21, wherein the antigen comprises haemagglutinin and/or neuraminidase surface protein.
- 38. (previously presented): The pharmaceutical vaccine composition according to any one of claims 21, 24, 26, 36, or 37, further comprising a second adjuvant.
- (previously presented): The pharmaceutical vaccine composition of claim 38, wherein the second adjuvant is an oil-in-water emulsion.
- 40. (currently amended): The A pharmaceutical vaccine composition of claim 21, comprising a benzazole compound adjuvant and an antigen, wherein said benzazole compound adjuvant is present in an amount effective to enhance the immune response in a subject to the antigen, and wherein the benzazole compound is of formula (XXI):

wherein A is -O-[[.]];

W is selected from the group consisting of -CH₂-, -O-, -S-, -NH-, and -NR₈-;

R₇ is selected from the group consisting of carbocyclyl, unfused carbocyclylcarbocyclyl, substituted aryl, unsubstituted aryl, substituted heteroaryl, unsubstituted fused arylheteroaryl, unsubstituted fused arylheteroaryl, substituted unfused arylaryl and unsubstituted unfused arylaryl;

 R_6 is selected from the group consisting of substituted or unsubstituted aryl, and substituted or unsubstituted heteroaryl; and,

Rs is independently substituted or unsubstituted alkyl.

or a pharmaceutically acceptable salt, ester, or prodrug thereof.

- 41. (previously presented): The pharmaceutical vaccine composition of claim 40, wherein R_6 is substituted or unsubstituted pyridine.
- 42. (previously presented): The pharmaceutical vaccine composition of claim 41, wherein said pyridine is substituted by a carboxamide.
- 43. (new): The pharmaceutical vaccine composition of claim 40 wherein the antigen is associated with a disease selected from the group consisting of mycobacterial infection, cholera, plague, typhoid, hepatitis B, influenza, polio, rabies, measles, mumps, rubella, yellow fever, tetanus, diphtheria, hemophilus influenzae b, meningococcal infection, and pneumococcal infection.
- 44. (new): The pharmaceutical vaccine composition according to claim 40 wherein the immune response is the cellular production of one or more cytokines.
- 45. (new): The pharmaceutical vaccine composition of claim 40, wherein the benzazole compound is selected from the group consisting of:

 $N-methyl-4-[(2-\{[2-(1-methylethyl)phenyl]amino\}-1H-benzimidazol-5-yl)oxy]pyridine-2-carboxamide:$

N-methyl-4-{[1-methyl-2-({3-[(trimethylsilyl)ethynyl]phenyl}amino)-1H-benzimidazol-5-ylloxy}pvridine-2-carboxamide:

 $N-methyl-4-[(1-methyl-2-\{[2-(phenylcarbonyl)phenyl]amino\}-1H-benzimidazol-5-yl) oxy]pyridine-2-carboxamide;$

4-({2-[(4-butylphenyl)amino]-1,3-benzothiazol-5-yl}oxy)-N-methylpyridine--2-carboxamide;

N-methyl-4-(1-methyl-2-[(6-pyrrolidin-1-ylpyridin-3-yl)amino]-1H-benzimidazol-5-yl} oxy)pyridine-2-carboxamide;

- 4-({2-[1,1'-bi(cyclohexyl)-2-ylamino]-1-methyl-1 H-benzimidazol-5-yl}oxy)-N-methylpyridine-2-carboxamide;
- 4-({2-[(4-chlorophenyl)amino}-1-methyl-1 H-benzimidazol-5-yl}oxy)-N-1,3-thiazol-2-ylpyridine-2-carboxamide;
- 4-[(1-methyl-2-{[2-(methyloxy)phenyl]amino}-1H-benzimidazol-5-yl)oxy]-N-[-3-(methyloxy)propyl]pyridine-2-carboxamide; and
 - 4-({2-[(4-ethylphenyl)amino]-1,3-benzoxazol-5-yl}oxy)-N-methylpyridine-2-carboxamide; or a pharmaceutically acceptable salt thereof.
- (new): The pharmaceutical vaccine composition of claim 40, wherein the antigen is associated with influenza.
- (new): The pharmaceutical vaccine composition of claim 40, wherein the antigen comprises haemagglutinin and/or neuraminidase surface protein.
- (new): The pharmaceutical vaccine composition according to claim 40, further comprising a second adjuvant.
- (new): The pharmaceutical vaccine composition of claim 48, wherein the second adjuvant is an oil-in-water emulsion.